

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Cancelled)

2. **(Currently Amended)** The method as claimed in claim 518, wherein the semiconductor power switch used is an IGBT or MOS power transistor, and the gate terminal and the emitter terminal are connected to one another with high impedance in the case of the intrinsically turned-off IGBT, as a result of which a short-time switch-on of the semiconductor power switch is achieved when a current spike occurs.

3. **(Currently Amended)** The method as claimed in claim 185, wherein the control terminal of the turned-off semiconductor power switch has applied to it a voltage pulse of predetermined duration and amplitude in a manner temporally coordinated with the occurrence of a current spike at the freewheeling device.

4. **(Currently Amended)** The method as claimed in claim 185, wherein the control terminal of the turned-off semiconductor power switch has applied to it a stepped voltage pulse of predetermined short time duration in a manner temporally coordinated with the occurrence of a current spike.

5. **(Currently Amended)** The method as claimed in claim 18, A method for limiting an overvoltage at a freewheeling device arranged in parallel with a semiconductor power switch, wherein at least a first and a second semiconductor power switch are connected in series, each of the first and second semiconductor power switches being parallel connected with an associated freewheeling device, and an output terminal to an inductive load is arranged between the two, the method comprising the steps of:

—controlling one of the semiconductor power switches into the turned off state and the other one into the non-turned off state;

—switching the turned-off semiconductor power switch, at least at the instant of the occurrence of an overvoltage at the associated freewheeling device or during the decay of a current spike, temporarily on to such an extent that a short time current is generated at the output of the semiconductor power switch;

wherein the voltage at the associated freewheeling device is fed back, without amplification, via a the feedback path between the output terminal and a common input of a push pull stage of a gate driver connected to the control terminal of the turned-off semiconductor power switch, as a result of which the turned-off semiconductor power switch is momentarily and at least partially switched on during the voltage spike.

6. (Currently Amended) The method as claimed in claim 18, A method for limiting an overvoltage at a freewheeling device arranged in parallel with a semiconductor power switch, wherein at least a first and a second semiconductor power switch are connected in series, each of the first and second semiconductor power switches being parallel-connected with an associated freewheeling device, and an output terminal to an inductive load is arranged between the two, the method comprising the steps of:

—controlling one of the semiconductor power switches into the turned-off state and the other one into the non-turned-off state;

—switching the turned-off semiconductor power switch, at least at the instant of the occurrence of an overvoltage at the associated freewheeling device or during the decay of a current spike, temporarily on to such an extent that a short time current is generated at the output of the semiconductor power switch;

wherein the a current gradient in the freewheeling device is fed back via a further the feedback path to the between a control terminal and an emitter terminal of the turned-off semiconductor power switch in such a way that the turned-off semiconductor switch is momentarily and at least partially switched on during the current spike.

7. (Cancelled).

8. (Cancelled).

9. (Cancelled).

10. (Cancelled).

11. (Cancelled).

12. (Cancelled).

13. (Previously presented) A circuit arrangement for limiting an overvoltage at a freewheeling device arranged in parallel with a semiconductor power switch, comprising at least a first and a second semiconductor power switch each parallel-connected with a freewheeling device being connected in series, an output terminal arranged between the first and second semiconductor power switch for coupling to an inductive load, wherein a feedback path is provided between output and control terminals of a power driver, the feedback path comprising a transformer in series with an amplifier connected to a common input of a push-pull stage of a gate driver connected to the control terminal.

14. (Previously Presented) The circuit arrangement as claimed in claim 13, wherein a voltage drop across internal and/or external leakage inductances is utilized for the feedback.

15. (Previously Presented) The circuit arrangement as claimed in claim 13, wherein a current rise is fed back through the induction in a transformer.

16. **(Currently Amended)** The circuit arrangement as claimed in claim [[7]]13, wherein an IGBT power transistor is used as the semiconductor power switch.

17. **(NEW)** A method for limiting an overvoltage at a freewheeling device arranged in parallel with a semiconductor power switch, with at least a first and a second semiconductor power switch each parallel-connected with a freewheeling device being connected in series, and with an output terminal arranged between the first and second semiconductor power switch for coupling to an inductive load, the method comprising the steps of:

- providing a feedback path between output and control terminals of a power driver, the feedback path comprising a transformer in series with an amplifier connected to a common input of a push-pull stage of a gate driver connected to the control terminal.

18. **(NEW)** The method according to claim 17, further comprising the steps of:

- controlling one of the semiconductor power switches into the turned-off state and the other one into the non-turned-off state,

- switching the turned-off semiconductor power switch, at least at the instant of the occurrence of an overvoltage at the associated freewheeling device or during the decay of a current spike, temporarily on to such an extent that a short-time current is generated at the output of the semiconductor power switch.